

CLAIMS

Please replace all prior versions, and listings, of claims in the application with the following list of claims:

1. (Cancelled)
2. (Currently Amended) An electrically conductive circuit element formed on a surface using a drop-on-demand deposition technique to deposit multiple droplets of ~~polymeric-based or~~ inorganic-based fluid, the conductivity of the electrically conductive element being in the range from about 1x10<sup>0</sup>S.cm<sup>-1</sup> to about 4x10<sup>5</sup>S.cm<sup>-1</sup>.
3. (Previously Presented) An element according to Claim 2, wherein the fluid comprises conductive particles.
4. (Previously Presented) An element according to Claim 3, wherein the conductive particles have a dimension less than or equal to 1 micron.
5. (Previously Presented) An element according to Claim 2, comprising a plurality of stacked electrically conductive elements connected by vias to provide electrical conduction between elements.
6. (Previously Presented) An element according to Claim 5, comprising at least one isolation layer, the or each isolation layer being disposed between adjacent elements.
7. (Previously Presented) An element according to any of Claims 2 to 6, comprising a plurality of discrete portions, each portion being formed from respective materials.
8. (Cancelled)
9. (Cancelled)

10. (Previously Presented) An element according to Claim 2, the fluid droplets comprising at least one of a sol-gel, an organically-modified ormocer, and an organically-modified silicate.

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Currently Amended) A method of forming an electrically conductive circuit element on a surface using a drop-on-demand deposition technique to deposit droplets of ~~polymeric-based~~ or inorganic-based fluid, the method comprising depositing a plurality of droplets of said fluid to form the circuit element, the conductivity of the circuit element being in the range from about  $1 \times 10^0 \text{ S.cm}^{-1}$  to about  $4 \times 10^5 \text{ S.cm}^{-1}$ .

17. (Previously Presented) A method according to Claim 16, wherein the fluid comprises conductive particles.

18. (Previously Presented) A method according to Claim 17, wherein the conductive particles have a dimension less than or equal to 1 micron.

19. (Previously Presented) A method according to Claim 16, wherein the circuit element comprises a plurality of stacked electrically conductive elements connected by vias to provide electrical conduction between elements.

20. (Previously Presented) A method according to Claim 19, wherein the circuit element comprises at least one isolation layer, the or each isolation layer being disposed between adjacent elements.

21. (Previously Presented) A method according to Claim 16, comprising subjecting the deposition material to radiation treatment before, during or after deposition.

22. (Previously Presented) A method according to Claim 16, comprising curing the deposited fluid by exposing the deposited fluid to electromagnetic radiation.

23. (Previously Presented) A method according to Claim 16, wherein the circuit element comprises a diode.

24. (Previously Presented) A method according to Claim 16, wherein the circuit element comprises a plurality of discrete portions.

25. (Cancelled)

26. (Cancelled)

27. (Previously Presented) A method according to Claim 16, further comprising using an electrostatic spray head to deposit said deposition material.